	Application No.	Applicant(s)	
	10/604,799	FICKEN ET AL.	
Notice of Allowability	Examiner	Art Unit	
··	Cassandra Cox	2816	
The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this app or other appropriate communication IGHTS. This application is subject to	olication. If not includ will be mailed in due	ed course. THIS
1. \boxtimes This communication is responsive to <u>amenment filed on 13</u>	<u>1/25/04</u> .		
2. The allowed claim(s) is/are <u>1-20 and 22-34</u> .			
3. \boxtimes The drawings filed on <u>22 September 2003</u> are accepted by	the Examiner.		
 4. ☐ Acknowledgment is made of a claim for foreign priority ur a) ☐ All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have 2. ☐ Certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority do International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 	be been received. be been received in Application No cuments have been received in this i	national stage applica	
5. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give			IOTICE OF
6. CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.		
(a) I including changes required by the Notice of Draftspers	on's Patent Drawing Review (PTO-	948) attached	
1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date	•		
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment or in the O	ffice action of	
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t	.84(c)) should be written on the drawin he header according to 37 CFR 1.121(c	gs in the front (not the	back) of
7. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT	sit of BIOLOGICAL MATERIAL n FOR THE DEPOSIT OF BIOLOGICA	nust be submitted. I AL MATERIAL.	Note the
Attachment(s)			
1. Notice of References Cited (PTO-892)	5. Notice of Informal Page	• • • • • • • • • • • • • • • • • • • •	O-152)
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	6. ☐ Interview Summary Paper No./Mail Date	ė	
3. Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date	_		
 Examiner's Comment Regarding Requirement for Deposit of Biological Material 	8. ⊠ Examiner's Stateme 9. □ Other	nt of Reasons for Allo	owance
U.S. Patent and Trademark Office	SUPERV	MOTHY P. GALLAHAN ASORY PATENT EXAMIN	

Application/Control Number: 10/604,799 Page 2

Art Unit: 2816

DETAILED ACTION

Allowable Subject Matter

- 1. Claims 1-20 and 22-34 are allowed.
- 2. The following is an examiner's statement of reasons for allowance: Claims 1-13 are allowed because the closest prior art of record fails to disclose a circuit as shown in Figure 1B wherein the method of detecting loss of signal on a pair of differential signal lines comprises generating a signal level from the voltages on the pair of differential signal lines, the signal level being averaged over a first period of time (step 106); generating a reference level from the threshold level and the detected common mode level, the reference level being averaged over a second period of time longer than the first period of time; and comparing the signal level to the reference level to determine if a signal is present on the pair of signal lines in combination with the rest of the limitations of the base claims and any intervening claims. Claims 14-20 and 22-34 are allowed because the closest prior art of record fails to disclose a circuit as shown in Figure 2 wherein the apparatus comprises a level generator (202) operable to detect a common mode level of voltages on a pair of signal lines (DAN, DAP); and operable to generate a threshold level referenced to the detected common mode level; a first charge pump (710 which is contained within block 203, see Figure 7A) operable by the voltages on the pair of signal lines to generate a short-term averaged signal level (INN); a second charge pump (720, which is also contained within block 203, see Figure 7A) operable by the threshold level and the common mode level to generate a reference level (INP) averaged over a longer term than the signal level (INN); and a comparator

Art Unit: 2816

operable to compare the signal level (INN) to the reference level (INP) to determine if a signal is present on the pair of signal lines in combination with the rest of the limitations of the base claims and any intervening claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cassandra Cox whose telephone number is 571-272-1741. The examiner can normally be reached on Monday-Thursday from 7:00 AM to 4:30 PM and on alternate Fridays from 7:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/604,799 Page 4

Art Unit: 2816

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CC

January 10, 2005

MOTHY P. CALLAHAN
SUPERVISORY PATENT EXAMINER

→ ECHNOLOGY CENTER 2800